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# Identifying the Poor and Their Consumption Patterns

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We used three increasingly restrictive measures to differentiate the poor from the nonpoor. Findings show that little difference exists among those classified as poor by any of the three poverty measures used. However, compared with the nonpoor, the poor—by all three measures—were younger, had more children under age 18, and had fewer vehicles and wage earners. The poor were more likely than the nonpoor to be Black, be single, have a high school education; and to rent or reside in government housing. By using the most restrictive measure of poverty, we found significant spending differences between the poor and nonpoor for food at home, housing, health, transportation, and other expenses.

**T**he current poverty measure in the United States consists of a set of thresholds that are compared with household before-tax annual income and adjusted for household composition. Originally developed in the 1950's, the thresholds are based on the cost of a minimal diet times a multiplier of three to account for other expenses (4). The thresholds are adjusted periodically for inflation. In measure and design, however, the thresholds have not changed substantively since their inception.

Recently the official poverty measure has faced two broad criticisms. One: given the growth in in-kind and income transfer programs since the War on Poverty began in the 1960's, before-tax income no longer reflects accurately a household's economic resources (9). Two: the multiplier used in the official poverty measure is based on the assumption that households still spend one-third of their budget on food. Over time, however, the percentage of the household budget spent on food has declined, while the percentage of the

household budget spent on other items (i.e., housing, health care, transportation, and child care) has increased (2).

Alternative measures of poverty have been proposed to address these criticisms. For example, adding the value of in-kind transfers to before-tax income can help make income a better estimate of household economic resources (5). However, inaccurate reporting of income can cause practical problems when researchers use social survey data. Expenditure-based poverty measures have been proposed as another alternative to the current income-based measure (9,14,15).

The Consumer Expenditure Survey (CE), which provides extensive information on the expenditures of American consumers, is a logical data set to use to develop an expenditure-based measure of poverty. Lino (10) has proposed using total expenditures reported in the CE along with household income to assess poverty status. The measure based on total expenditures that is available in the CE, however, has been

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criticized as being biased because the purchase price of high-cost durables is included in the measure when the purchase is made. A measure that focuses on regular out-of-pocket expenses, so-called total outlays, has been proposed as an alternative to total expenditures (13).

The purpose of this paper is twofold. First, it examines the characteristics of households classified as poor by three increasingly restrictive measures of poverty: The official income-based measure, a total-expenditure measure plus the current income-based measure, and a total-outlay measure plus the previous two measures. Second, this paper examines the spending behavior of households classified as poor by the most restrictive of these three measures. Comparisons between the poor and the nonpoor are made.

## Method

### Data and Sample

Data are from the Interview portion of the 1994 CE, which is conducted by the Bureau of the Census for the Bureau of Labor Statistics (BLS). An ongoing survey, the CE gathers information on expenditures, income, and major sociodemographic characteristics of consumer units<sup>1</sup> in the civilian non-institutionalized population. BLS uses a rotating panel design to survey about 5,000 consumer units each quarter.

<sup>1</sup>A consumer unit is defined as either all members of a household who are related by blood, marriage, adoption, or other legal arrangement; a financially independent person living alone or as a roomer; or two or more persons living together and making joint expenditure decisions. In this paper, the terms consumer unit and household are used interchangeably.

Consumer units contribute five consecutive quarters of data; about 20 percent of the sample is replaced by new participants each quarter (16).

The CE treats each interview as an independent observation (16). We used CE weights to adjust the sample to reflect the population. We also omitted from this analysis consumer units whose household head was not White or Black, incomplete income reporters,<sup>2</sup> and consumer units with negative levels of household before-tax income, total expenditures, or total outlays.<sup>3</sup> The resulting unweighted sample size was 16,367.

### Poverty Measures

We used three measures of poverty in this study. The first measure compares household before-tax annual income to the official poverty guidelines. Adjustments for household size and the age

<sup>2</sup>Complete income reporters have provided information on major income sources such as wages and salaries, self-employment income, and Social Security income for the consumer unit for the previous 12 months. However, in addition to these major income sources, annual before-tax income also includes amounts received during the previous 12 months by members of the consumer unit for Supplemental Security Income, unemployment compensation, workers' compensation, veterans' payments, public assistance, interest and dividend income, pension income, rental income, alimony and child support received, and value of food stamps. A consumer unit that reports a value of zero for all sources of income is classified as an incomplete income reporter.

<sup>3</sup>These omissions were based largely on pragmatic reasons. Of the total sample, less than 4 percent were neither White nor Black. Incomplete income reporters and consumer units reporting negative levels of income or spending may have insufficient or incorrect income or expenditure data, thus limiting our ability to classify them appropriately as poor or nonpoor. Our decision to exclude incomplete income reporters and those with negative income or expenditures reduced the sample by about 2 percent.

of the household head in one- or two-person families are reflected in these guidelines. We classified those households reporting income below the relevant threshold as poor. This measure we termed the "single-hurdle" measure because only this one hurdle or standard must be cleared for the household to be considered poor.

Variations in income receipt and the inability or unwillingness of survey respondents to report completely and accurately how much income was received can cause income to be an unreliable measure of household economic resources (7,12,13). Further, in the CE, a consumer unit is classified as a complete income reporter when values have been reported for major income sources—even though information may not have been provided for all income sources (7,16). No attempt is made in the CE to impute income when it is missing. Obviously, when consumer income is understated (whether by error or intent), the consumer unit can be classified as poor when it is not.

Given these problems in measuring income, researchers have used total expenditures as a proxy for income (1,12). The theoretical basis for this substitution is the permanent income hypothesis. It suggests that consumers try to maintain a given level of consumption over time and are relatively unresponsive to transitory increases and decreases in income. Thus: compared with measures of annual income, annual total expenditures are a better representation of consumption patterns over the lifespan (7).

One drawback of using total expenditures instead of income when assessing poverty status is that a household might appear to be poor on the basis of total

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expenditures when it is simply saving rather than spending (11). To overcome this drawback, Lino (10) suggested using total expenditures in addition to, rather than instead of, income when assessing whether a household is above or below the poverty thresholds. The second measure of poverty we used in this study classified a household as poor if its before-tax annual income and its total annual expenditures were below the relevant dollar values of the official poverty thresholds. This measure we termed a “double hurdle” because two criteria must be met for a household to be considered poor.

In the CE, the purchase price of consumer durables is included in total expenditures when the purchase is made. Purchase of high-cost durables (i.e., vehicles) can bias the total-expenditure measure upward. Conversely, the CE excludes principal payments on home mortgages from total expenditures. (Home mortgage interest is included in total expenditures.) Thus the total-expenditure measure can be biased downward for homeowners who make mortgage payments. Rogers and Gray (13) have proposed an alternative measure called “total outlays” that is designed to capture the “regular out-of-pocket outlays of consumers.” This measure adds principal payments on home mortgages and on financed vehicles to total expenditures and subtracts the purchase price of financed vehicles. To construct our third measure of poverty, we computed total outlays for the sample. Then we classified a household as poor if its before-tax annual income, total expenditures, and total outlays were below the relevant official poverty guidelines. This measure we termed “triple hurdle” because three criteria must be met for the household to be classified as poor.

Introduction of each additional hurdle makes the definition of poverty more restrictive. Consequently, of those classified as poor by the single-hurdle measure, not all remain classified as poor when the double-hurdle measure is imposed. Of those designated as poor using the double hurdle, not all remain classified as poor when the triple-hurdle measure is applied.

### Variables

Variables used only in the descriptive statistics included household head over age 64, household size, number of vehicles, being a renter, government housing, before-tax income, total outlays, Supplemental Security Income (SSI), welfare benefits, and food stamp value (table 1). Variables used only in the regression analysis included region of residence, Interview quarter, and the poverty measure. Remaining variables were used in both the descriptive statistics and the regression analysis.

Sociodemographic variables used as independent variables in the regression analysis included age, education, and race of the household head (defined as the husband in husband-wife households); number of children less than age 18; household type; number of earners; and region of residence. These variables were selected to control for differences in need and preferences. Reference categories for the categorical variables were having a high school education, being White, being a husband-wife household, and residing in a rural area. The CE does not report region for rural residents in order to preserve the privacy of survey respondents. Thus we used rural residence as the reference category for the four urban regions, a common practice when using CE data.

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**...when the most restrictive definition of the poor is used... the poor and nonpoor have significantly different spending patterns for food at home, housing, health care, transportation, and other expenses....**

Economic variables used in the regression analysis included total expenditures and the poverty measure: a categorical variable coded 1 if the household was classified as poor by the most restrictive measure of poverty (the triple hurdle), 0 otherwise. Total expenditures were used as a proxy for income to address the problems of income measurement in the CE (1). The quarter<sup>4</sup> in which the interview took place was included in the study to control for possible seasonal effects in spending behavior. Quarter 4 was the reference category.

We used eight expenditure categories as dependent variables in the regression analyses: Food at home, food away from home, apparel and apparel services, housing, transportation, adjusted transportation,<sup>5</sup> health, and other. The “other” category included expenditures on tobacco, alcohol, education, reading, entertainment, personal care, personal

<sup>4</sup>Quarter 1 included months 1 through 3; quarter 2, months 4 through 6; quarter 3, months 7 through 9; and quarter 4, months 10 through 12.

<sup>5</sup>Analysis using the summary variable for transportation in the CE indicated that the poor spent more for transportation, all else equal. Because this result may have been related to the way the CE treats transportation expenditures, an alternative measure of transportation expenses was constructed. This alternative measure was conceptually similar to the total-outlay measure suggested by Rogers and Gray (13). Expenditures for public transportation were excluded from the summary measure of transportation, while principal payments for financed new and used cars and trucks were added, and the purchase price of financed new and used cars and trucks was subtracted. Specifically, adjusted transportation was the sum of annualized expenditures for net outlay for new and used cars and trucks; other vehicles; gas and motor oil; vehicle finance charges, maintenance and repairs; vehicle insurance; vehicle rental, leases, licenses, and other charges; principal payments for financed new and used cars and trucks; less the purchase price of financed new and used cars and trucks.

**Table 1. List of variables**

Variable	Measurement/description
<u>Sociodemographic</u>	
Age of household head	Continuous
Household head over age 64	Categorical 1 if true; 0 otherwise
Education of household head	Categorical Less than high school High school (reference category) Some college College
Race of household head	Categorical Black White (reference category)
Number of children under age 18	Continuous
Number of earners	Continuous
Number of vehicles	Continuous
Household type	Categorical Husband-wife (reference category) Male single parent Female single parent One person Other
Household size	Continuous
Region of residence	Categorical Northeast urban Midwest urban South urban West urban Rural (reference category)
Renter	Categorical 1 if rent; 0 otherwise
Government housing	Categorical 1 if have; 0 otherwise
<u>Economic</u>	
Before-tax income	Continuous
Total expenditures	Continuous
Total outlays	Continuous
Supplemental Security Income	Continuous
Welfare benefits	Continuous
Food stamp value	Continuous

**Table 1. List of variables (Cont'd)**

Variable	Measurement/description
<u>Other independent</u>	
Poverty measure	Categorical 1 if poor by triple-hurdle measure; 0 otherwise
Interview quarter	Categorical Quarter 1 Quarter 2 Quarter 3 Quarter 4 (reference category)
<u>Expenditure</u>	
Food at home	Food and beverages purchased and prepared by the consumer unit for its own use
Food away	Food and beverages purchased by the consumer unit at restaurants, cafes, and fast-food establishments
Apparel and apparel services	Expenditures for shoes, clothing, sewing supplies, laundry, and dry cleaning
Housing	Expenditures for mortgage interest, property tax, maintenance, repairs, insurance and other related expenses, rent, utilities, household operations, and home furnishings
Health	Expenditures for health insurance, medical services, prescription drugs, and medical supplies
Transportation	Expenditures for new and used cars and trucks, gasoline, maintenance and repairs, vehicle insurance, and vehicle rental
Adjusted transportation	Expenditures for transportation plus principal payments for financed new and used cars and trucks less purchase price of financed cars and trucks
Other	Expenditures for tobacco, alcohol, education, reading, entertainment, personal care, personal insurance, cash contributions, and miscellaneous goods and services
Total expenditures	Sum of expenditures for food at home, food away, apparel and apparel services, housing, health, transportation, and other goods and services

insurance, cash contributions, and miscellaneous items. Multiplying the total dollar amount spent on each of the eight expenditure categories by four annualized the quarterly expenditure data.

### Statistical Analysis

To compare the characteristics of the poor and nonpoor, we computed weighted means for relevant variables for four groups: Those classified as poor when the single-hurdle measure of poverty was used, those classified as poor when the double-hurdle measure of poverty was used, those classified as poor when the triple-hurdle measure of poverty was used, and those not classified as poor by any of the three measures. To compare spending patterns of the poor and nonpoor, we included in each regression analysis a dummy variable indicating the household was poor by the most restrictive measure of poverty. Because all expenditure categories used in this study had a relatively low percentage of zero spending, ordinary least squares (OLS) regression results were not biased (8). Including the poverty measure in the regressions indicated whether significant differences existed in the spending behavior of the poor and nonpoor after controlling for the age, education, and race of the household head, the number of children less than age 18, household type, number of earners, region of residence, and quarter in which the interview was conducted.

**Nearly half of the sample that is classified as poor by the income threshold measure is no longer classified as poor when...total expenditures and total outlays must also be below the poverty thresholds.**

## Findings

### Comparison of Characteristics

When the single-hurdle measure of poverty was used, 15 percent of the sample was classified as poor.<sup>6</sup> When the second hurdle was imposed, about half as many—7.4 percent of the sample—was still classified as poor. Imposing the third hurdle reduced the percentage of poor to 7.2 percent.

We found little difference among the characteristics of those classified as poor by any of the three measures (table 2). This result is not surprising: the double- and triple-hurdle measures identify a subset of those initially identified as poor by the single-hurdle measure. In general, the poor households were headed by someone who was about 45 years old. Average household size is close to 3. Compared with households classified as poor by the single-hurdle measure, households classified as poor by either the double- or triple-hurdle measure had a slightly larger household size with more children less than age 18 but with fewer vehicles and earners.

While households classified as poor by all three poverty measures reported less income than expenditures, the difference between before-tax income and total expenditures or total outlays is greatest for those classified as poor by the single-hurdle measure. However, this group reported the smallest average dollar amount of transfer income (SSI, welfare, food stamp) among the poor, suggesting credit or unreported income sources make up the difference. Nearly one-fourth of the poor household heads

<sup>6</sup>This percentage compares favorably with the 14.5 percent reported for the U.S. population in the *Statistical Abstract of the United States 1996*, Table No. 736, "Persons Below Poverty Level, by Race and Family Status 1979 to 1994," p. 475.

were Black; over 40 percent had less than a high school education and lived alone. Over half of the poor were renters; about 10 percent lived in government housing.<sup>7</sup>

Those classified as not poor by all three poverty measures were slightly older and more likely to be living in husband-wife households than were those classified as poor. Relatively few had children under 18 years of age, suggesting these households were preparing their older children for adulthood. This group, on average, had the largest number of earners and vehicles. Mean before-tax household income was \$40,424 with mean total expenditures and mean total outlays of \$32,804 and \$32,629, respectively. Interestingly, a few in this group reported receipt of welfare benefits and housing support. Perhaps some of the household units in this group include one or more members (i.e., an elderly parent living with an adult child or a parent and child living with the child's grandparents) who could qualify for government transfers.

### Comparison of Spending Behavior

Expenditure categories used in this study focused on the basic necessities of food, clothing, shelter, transportation, and health care. Remaining expenditure categories were classified as other. Results of the OLS regressions indicate that when the most restrictive definition of the poor is used (the triple-hurdle measure), the poor and nonpoor have

<sup>7</sup>These results differ somewhat from Lino's (10). The differences are likely the result of focusing on different groups for analysis. Lino studied households with children. Our study includes households with and without children. Consequently, in our study, the average age of the household head is older, and the household size is smaller.

**Table 2. Means of selected variables for the poor and nonpoor**

	Poverty measure for the poor			Nonpoor
	Single hurdle (15% of sample)	Double hurdle (7.4% of sample)	Triple hurdle (7.2% of sample)	
	<i>Means</i>			
Age of household head	45.54	44.50	44.55	48.56
Household size	2.51	2.71	2.69	2.51
Number of children <18 years	0.96	1.19	1.19	0.64
Number of vehicles	0.98	0.66	0.63	2.15
Number of earners	0.77	0.65	0.63	1.41
Before-tax income	\$6,913.45	\$7,183.25	\$7,163.55	\$40,423.93
Total expenditures	\$14,124.59	\$8,259.19	\$8,165.59	\$32,803.81
Total outlays	\$14,185.75	\$8,419.23	\$8,274.01	\$32,628.84
Supplemental Security Income	\$360.07	\$482.33	\$474.81	\$96.12
Welfare benefits	\$793.66	\$1,144.77	\$1,162.43	\$63.28
Food stamp value	\$693.46	\$1,033.65	\$1,043.91	\$42.80
	<i>Percent</i>			
Household head >64 years	24	22	22	22
Household head Black	23	28	28	8
Household head education				
<High school	41	50	50	17
High school	27	27	27	31
Some college	23	20	19	25
College	8	3	3	27
Household type				
Husband-wife	26	21	20	57
Male single parent	1	1	1	1
Female single parent	17	22	22	4
One person	41	41	42	27
Other	15	15	15	11
Renter	55	60	61	30
Government housing	7	10	11	1

significantly different spending patterns for food at home, housing, health care, transportation, and other expenses (table 3). No significant differences in spending between the poor and nonpoor were found for food away from home, apparel and apparel services, and adjusted transportation.

With two exceptions—transportation and other expenses—the poor spent less than the nonpoor spent. Using the summary measure of transportation in the CE, we found that the poor spent, on average, \$1,904 more than did the nonpoor for transportation. Additional investigation suggested this unexpected result was due to differential expenditures for new and used cars and trucks and for public transportation. When transportation expenses were adjusted to remove expenses for public transportation and the net outlay for financed vehicles (comparable to the adjustment made to total expenses to compute total outlays), the spending difference between poor and nonpoor ceased to be statistically significant.<sup>8</sup> Findings also indicated that the poor spent, on average, \$752 more than the nonpoor spent for other expenses (tobacco, alcohol, education, reading, entertainment, personal care, personal insurance, cash contributions, and miscellaneous).

<sup>8</sup>When amount spent for public transportation is the dependent variable in an ordinary least squares regression that has the same set of independent variables as are used in this article, the poor spent almost \$117 more per year than the nonpoor. The t value for this result is 2.366, significant at the 0.5 level. However, the adjusted R<sup>2</sup> for this model is quite low at 8 percent.

**Table 3. Regression analysis of spending pattern differences between poor and nonpoor**

Variable	Expenditure category			
	Food at home	Food away	Apparel and apparel services	Housing
	<i>Betas</i>			
Total expenditure	0.02***	0.03***	0.04***	0.18***
Age of household head	13.43***	3.11**	-0.94	1.00
Education of household head				
<High school	133.01*	-48.71	-91.10	-405.17*
Some college	55.34	68.42	219.05***	448.61**
College	136.86**	264.93***	400.42***	2402.77***
Household head Black	-38.90	-147.11*	207.36***	52.24
Number of children <18 years	539.85***	116.49***	68.24***	496.13***
Household type				
Male single parent	-348.96	322.25	-530.10*	-1542.99*
Female single parent	-429.04***	-110.70	79.89	-188.09
One person	-1130.89***	-349.88***	-188.73***	-1033.44***
Other	-228.84***	-64.75	-47.09	-563.65***
Number of earners	219.68***	119.12***	58.00*	-96.58
Region				
Northeast urban	499.11***	286.50***	256.93**	2728.70***
Midwest urban	-86.19	99.44	173.87*	1154.17***
South urban	44.28	126.65*	142.99*	1324.54***
West urban	307.83***	267.98***	35.95	2587.91***
Interview quarter				
Quarter 1	31.57	-64.38	424.86***	-203.76
Quarter 2	-2.34	-43.37	-157.42**	-131.60
Quarter 3	27.57	-95.53	-114.52*	-91.95
Poverty measure <sup>1</sup>	-295.91***	-89.39	-67.01	-1588.21***
Constant	1495.88***	605.43***	-60.09	1895.52***
Adjusted R <sup>2</sup>	.32	.23	.24	.50

<sup>1</sup>Triple-hurdle measure.

\* p<.01.

\*\* p<.001.

\*\*\* p<.0001.

## Discussion

The income threshold measure of poverty is an absolute standard designed to reflect ability to meet basic needs. A household is poor if its before-tax income is below the threshold. As a measure of poverty, it is simple to

implement and easy to understand. It provides an objective measure for assessing qualification for welfare benefits. But there are problems with its use. To the extent that the income people report is incomplete or incorrect, a household may be classified erroneously as poor. Before-tax income may

not reflect accurately a household's economic resources if the household receives transfer payments. Calculation of the thresholds has also been criticized. At present, the cost of families' basic needs is calculated as three times the cost of a minimal diet, adjusted for household composition. However, in



**Table 3. Regression analysis of spending pattern differences between poor and nonpoor (Cont'd)**

Variable	Expenditure category			
	Health	Transportation	Adjusted transportation	Other expenses
	<i>Betas</i>			
Total expenditure	0.03***	0.44***	0.22***	0.26***
Age of household head	35.98***	-44.39***	-12.93*	-8.19
Education of household head				
<High school	-62.27	802.17	238.30	-327.92
Some college	-1.97	-1257.50***	-306.83	468.05*
College	-76.65	-4791.83***	-1522.25***	1664.28***
Household head Black	-483.82***	759.84*	-95.36	-349.61
Number of children <18 years	56.77	-739.05***	-335.41***	-538.42***
Household type				
Male single parent	-720.62*	1940.50	1206.68	879.92
Female single parent	-252.75	1071.07*	64.39	-170.38
One person	-636.75***	2555.43***	451.39*	784.26***
Other	-309.16***	1525.53***	310.70	-312.04
Number of earners	-250.61***	-778.24***	72.71	728.63***
Region				
Northeast urban	-479.95***	-3132.72***	-1889.52***	-138.58
Midwest urban	-290.16***	-1298.98***	-607.02*	247.85
South urban	-145.14	-1515.81***	-705.68**	22.49
West urban	-392.34***	-2559.26***	-1355.15***	-248.07
Interview quarter				
Quarter 1	30.97	-351.27	-94.56	132.01
Quarter 2	193.33*	132.89	79.40	8.51
Quarter 3	31.06	415.11	153.65	-171.74
Poverty measure <sup>1</sup>	-615.67***	1904.35***	97.84	751.84**
Constant	-82.76	-1685.66**	255.40	-2168.32***
Adjusted R <sup>2</sup>	0.14	0.53	0.31	.52

<sup>1</sup>Triple-hurdle measure.

\* p<.01.

\*\* p<.001.

\*\*\* p<.0001.

the years since the threshold was implemented, the percentage of food in the budget has declined, making the multiplier too small, and other expenditure categories (i.e., housing, health care, transportation, and child care) now vie with food for consideration as “basic expenses” (2).

An expenditure-based measure of poverty proposes several advantages over an income-based measure. It allows a wide definition of basic expenses to be considered. Consumers are often more willing to disclose expenditures than income. Expenditures tend to be free of the transitory increases and

decreases that can occur with income. But consumers can choose to spend less than income and thus be misclassified as poor when an expenditure-based measure is used. Including the net purchase price of high-cost durables in expenditures when the purchase is made, as is done in the CE, can bias

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results. Further, while income represents a measure of resources that can be used to secure items needed for survival, expenditures simply reflect past purchasing decisions. Nothing is known about either the quantity or quality of items purchased. Families and individuals are designated as poor by using any expenditure-based measure without reference to any objective standard of need (which the official income thresholds attempt to reflect by using cost of a minimal diet as a basis). Another practical concern is that, in its present form, the CE does not have a sufficient sample size to provide detailed regional analysis of poverty (3).

In this study, as in Lino's study (10), the use of a poverty measure based on annual before-tax income and annual total expenditures mitigates the limitations present when either income or expenditures are used alone. This study carries this approach one step further by imposing yet another criterion for comparison with the poverty thresholds—total outlays. Use of total outlays provides limited correction for the problem of having the purchase price of a high-cost durable included in total expenditures. The resulting poverty measure is restrictive. Nearly half of the sample that is classified as poor by the income threshold measure is no longer classified as poor when the additional criterion is imposed—that total expenditures and total outlays must also be below the poverty thresholds.

## Summary and Implications

The purpose of this paper was to compare the characteristics and spending behavior of households classified as poor and nonpoor by using three increasingly restrictive measures: An income-based measure (the current official poverty measure), the income-based measure plus a total expenditure-based measure, and the income- and total expenditure-based measure plus a total outlay-based measure. Findings indicate that little difference exists among those classified as poor by any measure. There are several differences in the characteristics of those classified as poor by any measure and those not classified as poor by any measure. After controlling for several socio-demographic variables, we found that spending patterns for food at home, housing, health, transportation, and other expenses were significantly different for those classified as poor by the triple-hurdle measure, the most restrictive measure of poverty, and the nonpoor. With the exception of transportation and other expenses, the poor spent less than the nonpoor spent.

It is beyond the scope of this research to propose which poverty measure should be used. Selection of a poverty measure must account for many factors, including the purposes for which the measure will be used, national living standards, and social norms regarding the ways in which, and the degree to which, those deemed poor should be

helped. However, we found relatively small differences in the characteristics of those classified as poor by either the double-hurdle or the triple-hurdle measure. This result suggests that while correcting for the cost of high-priced durables can be defended on logical and theoretical grounds, differentiating between total expenditures and total outlays may make little practical difference.

Comparing both income and expenditure levels with the official poverty thresholds offsets the limitations present when using a measure of income or expenditures alone to identify the poor. This approach helps minimize the possibility of misclassifying as poor those who underreport income but have high expenditures or those who have high incomes but choose a relatively low level of spending. The resulting poverty measure, however, is quite restrictive. If researchers or policymakers wish to identify those households in greatest need, this restrictive approach to identifying the poor may be helpful.

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